

PHENIX WEEKLY PLANNING



Nov. 21, 2013
Don Lynch

This Week

- Finish FVTX/VTX survey at CHEMISTRY -Done
- Move FVTX/VTX to 1008 -West Done East Ready
- Finish upgrading VTX/FVTX supply/return lines to stainless -Done
- Begin installing services for FVTX/VTX
- Begin Survey of FVTX/VTX in IR
- Survey beampipe
- Complete Assembly and test of MPC-Ex for run 14 -Done
- MPC-Ex lifting bracket load test -Done
- MPC-Ex magnetic material check out -Done
- MPC-Ex Install in MMS piston Hole
- Begin connecting MPC-Ex services
- Continue sPHENIX support
 - HCal prototype assembly
 - EMCal prototype assembly
- Future IR evolution modeling

Next Week

- Finish FVTX/VTX installation including services
- Finish FVTX/VTX survey in IR
- Finish Installing MPC-Ex services for run 14
- Continue sPHENIX support
 - HCal prototype assembly
 - EMCal prototype assembly
 - Tilting/rotating SupportStructure assembly & test
- Future IR evolution modeling
- Thanksgiving Holiday (Thursday and Friday no work)



FVTX/VTX East & West Assembled survey at Chemistry completed West moved to IR ready for installation

East ready for transport and installation.

VTX & FVTX Remaining Tasks

Transport VTX&FVTX assembly to PHENIX and install on rails.	11/25
Re-install coolant and N ₂ lines, LV, signal and HV cables and fibers	by ~11/27
Re-survey full detector in IR	by ~11/27
Re-commission VTX & FVTX	by 1/1/14

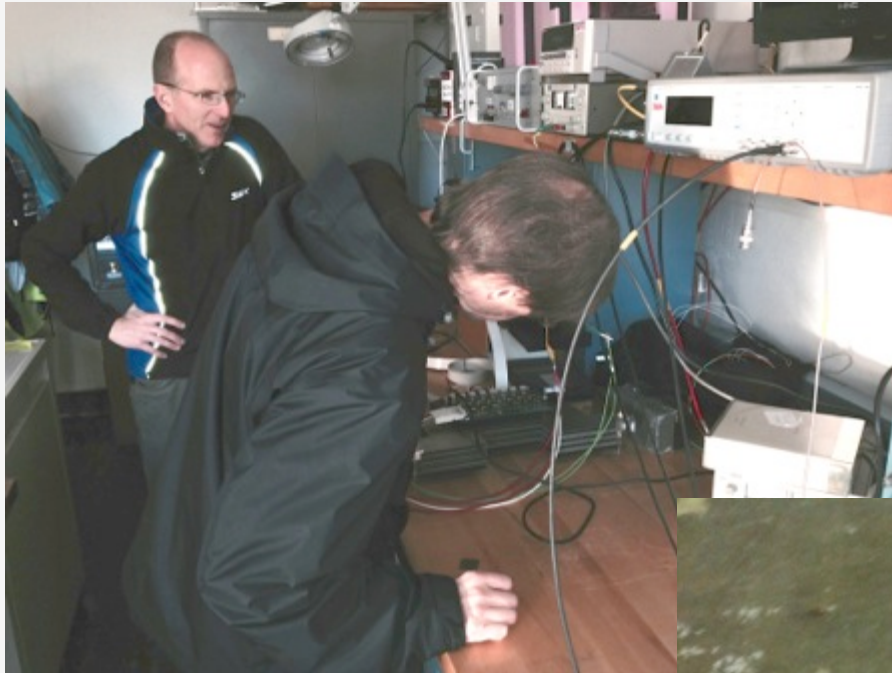
DC East & West Repairs Summary of Tasks

- DC West broken wire removal - 12/15 - 12/30



WEST - SOUTH - NORTH

MPC-Ex Initial (Partial) Installation



Vacuum bellows anti-squirm in MPC S Cavity installed.

Installation lifting bracket tested OK

Magnetic survey indicates some ferromagnetic material (NiFe 5%)

Analysis in progress to assess magnetic induced forces etc.



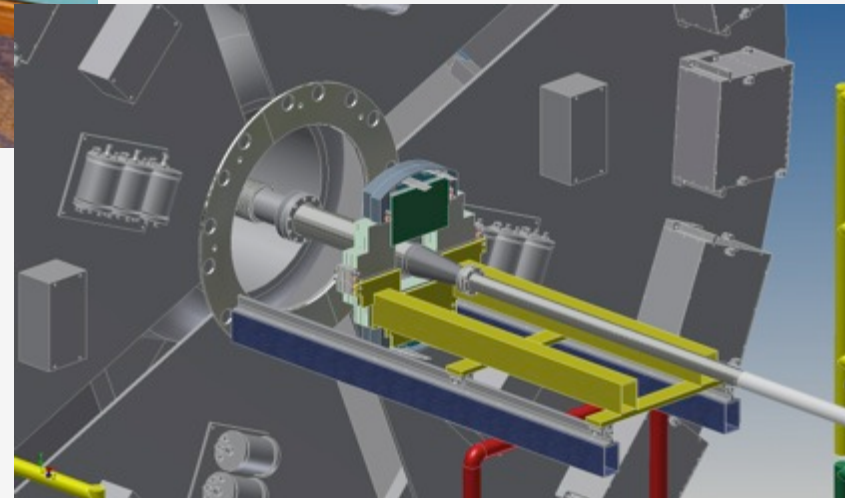
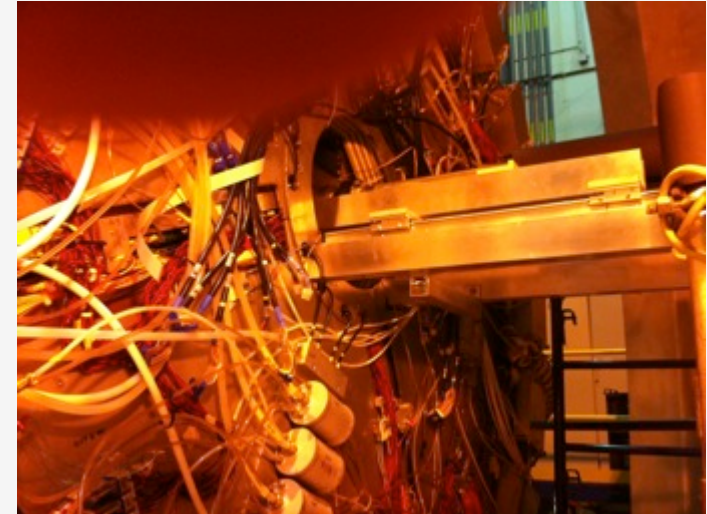
TECHNICAL SUPPORT WORK

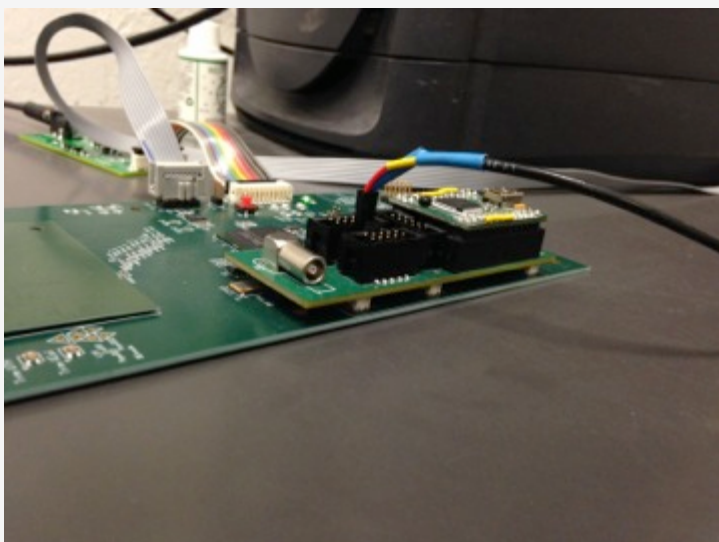
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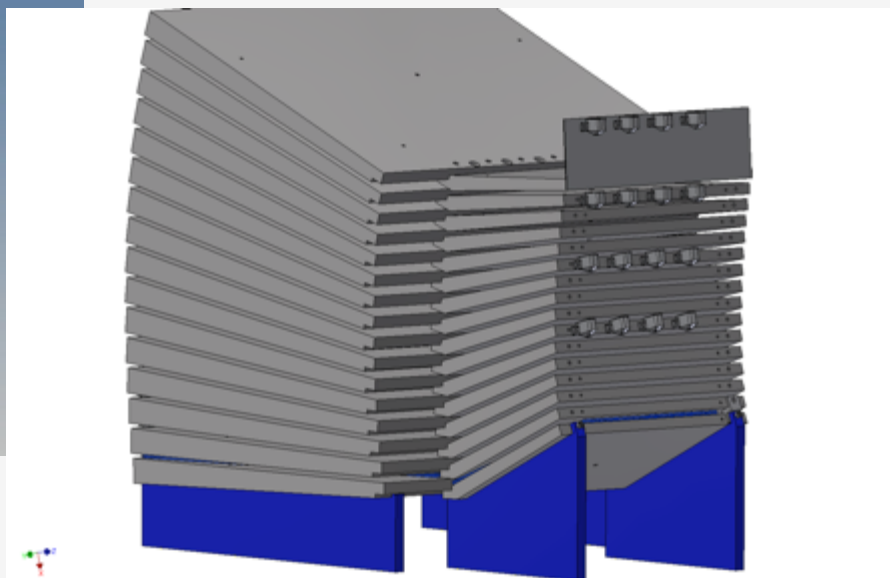
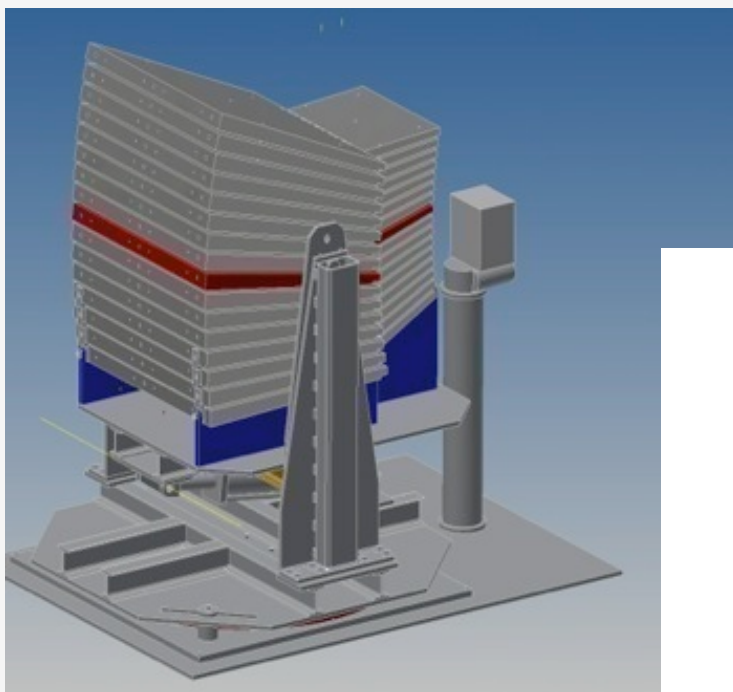
PHENIX - SDC FRONT - NO-3



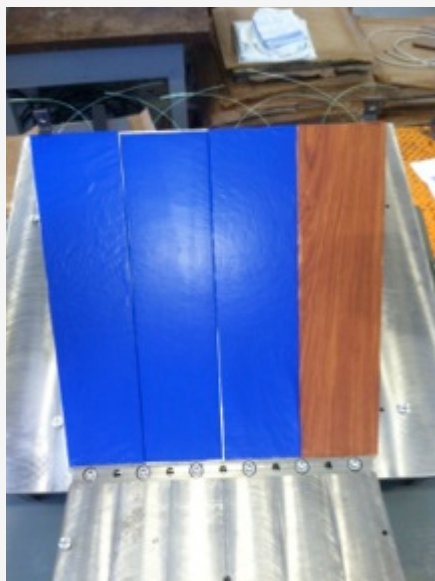
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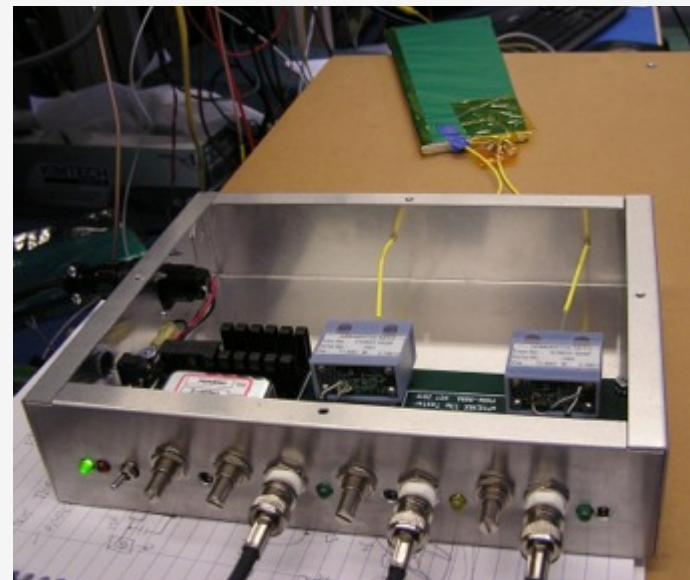
Hcal assembly in progress



11/21/2013

Hi-Bay
Prototype
Assembly Area

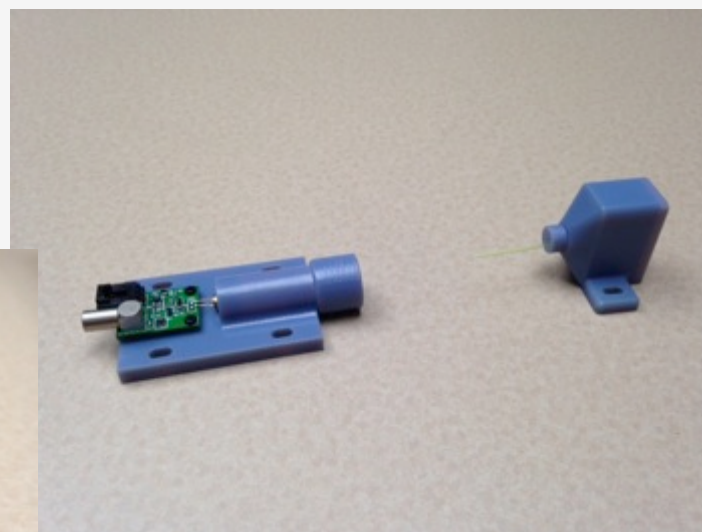
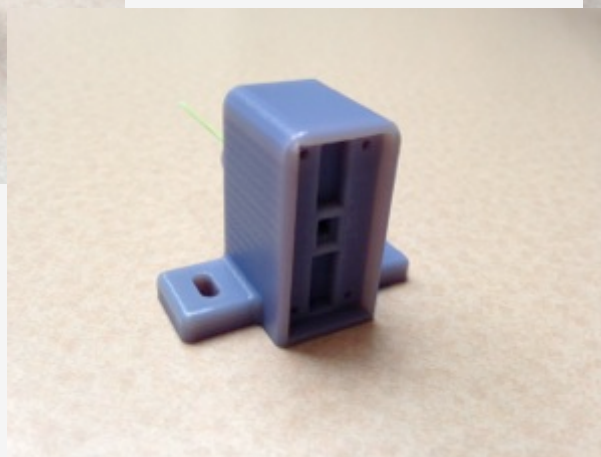
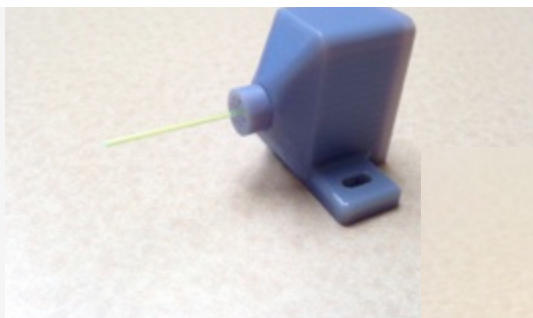
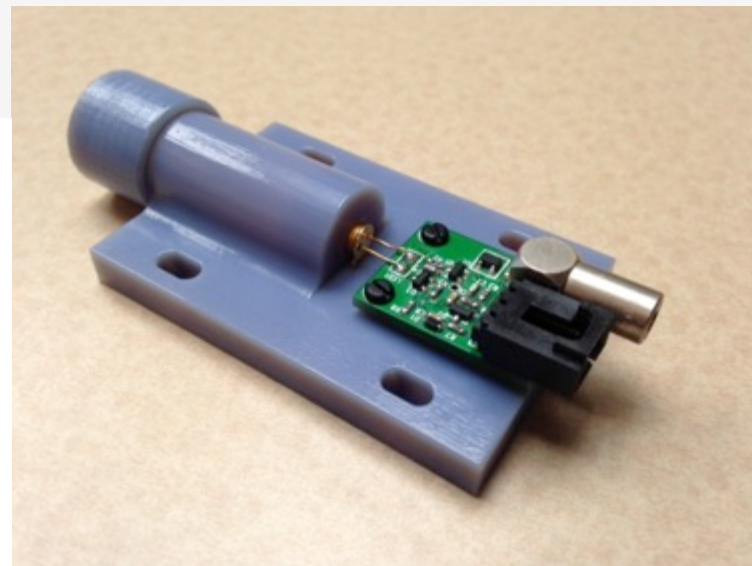
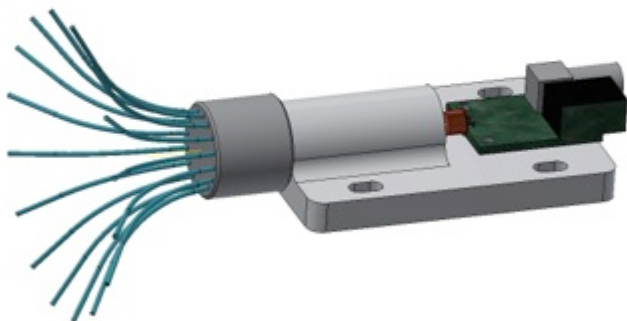
sPHENIX prototype
electronics rack



Steve Boose's Tile tester

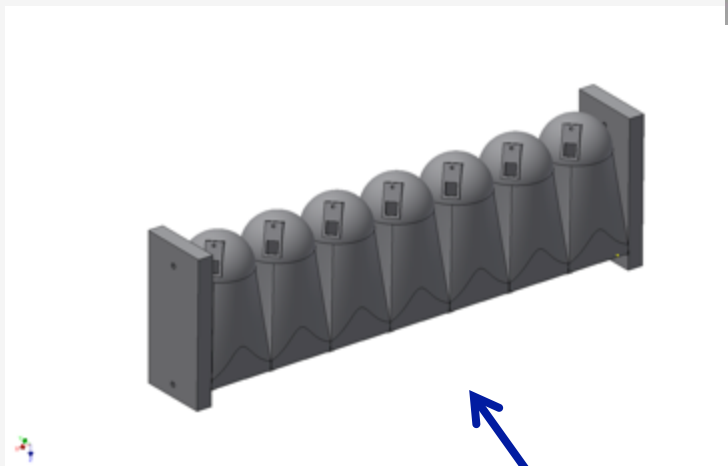
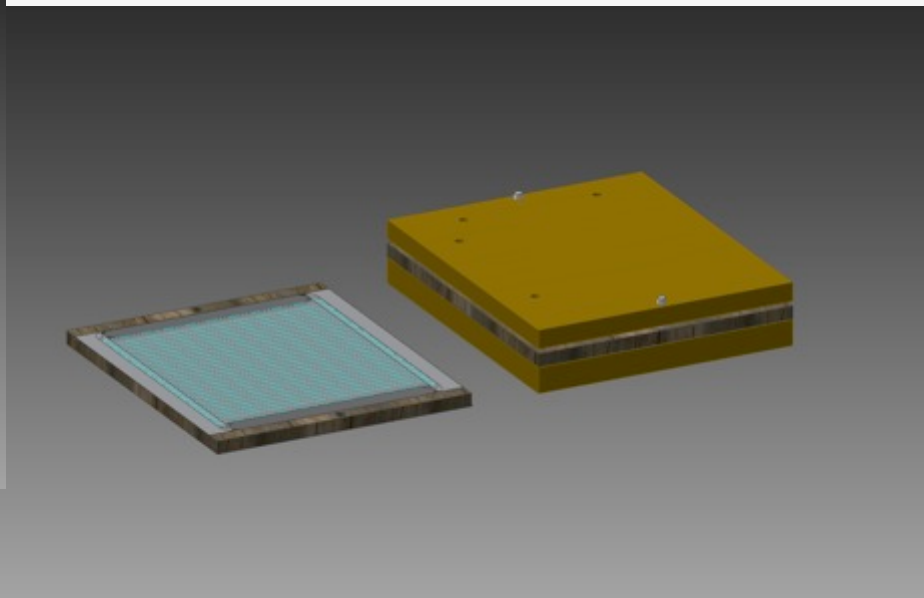
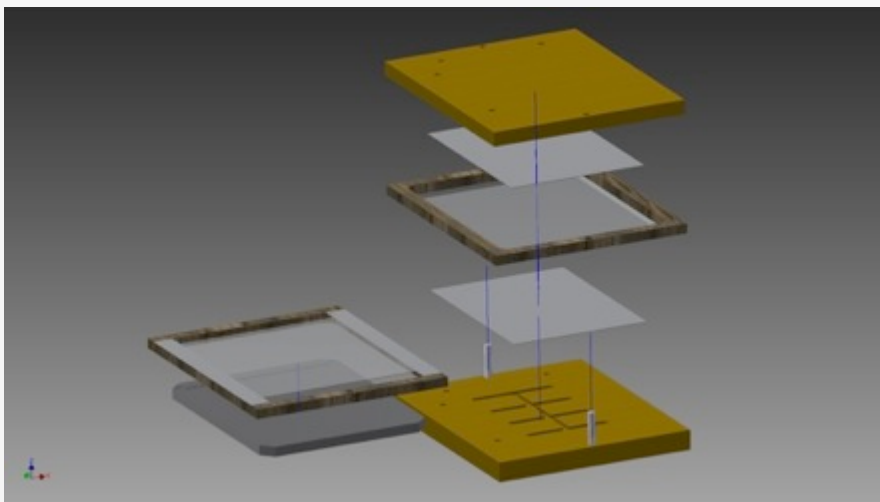


Light Collection for HCal



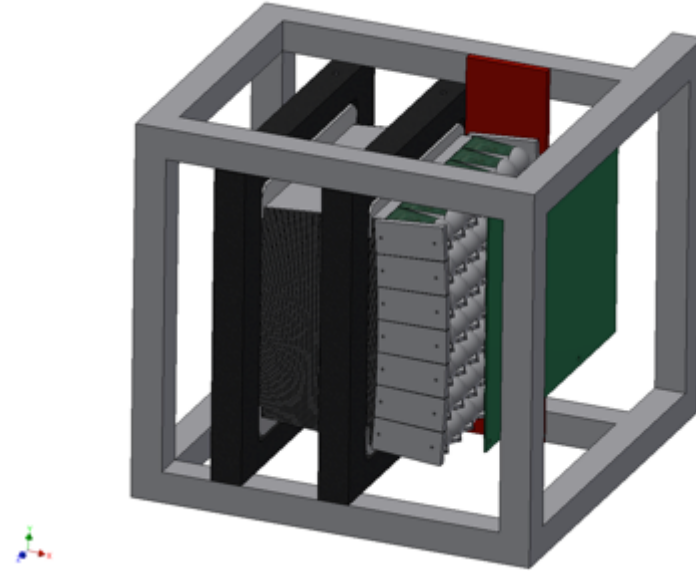
EMCal Prototype

TECHNICAL SUPPORT NOTES

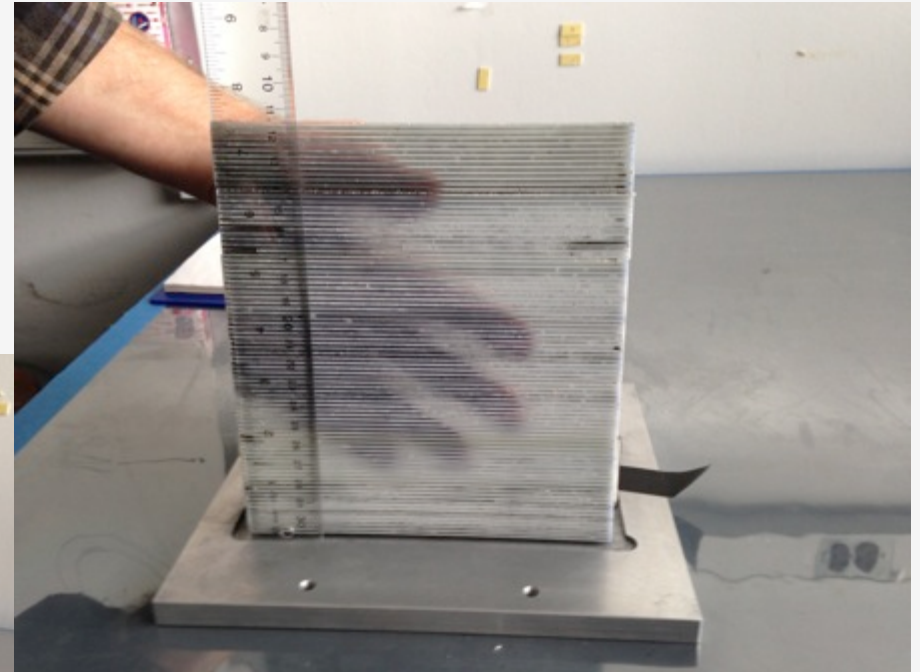


11/21/2013

"Droid Army" light collection

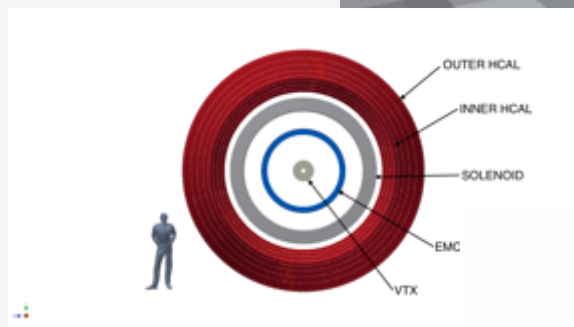
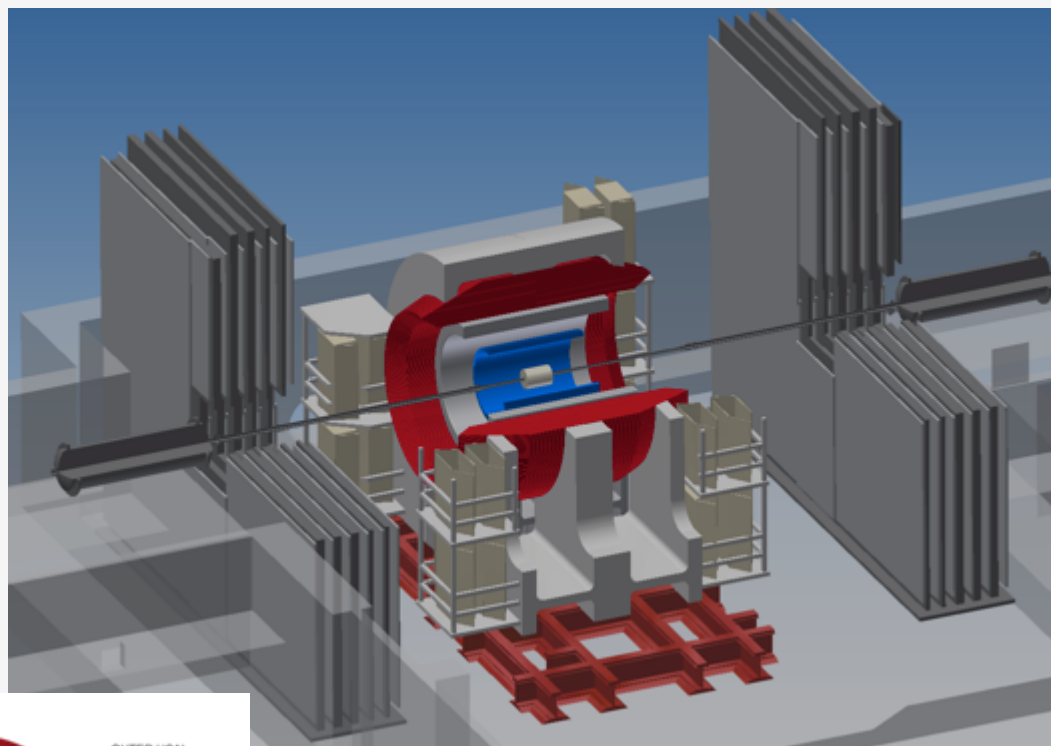
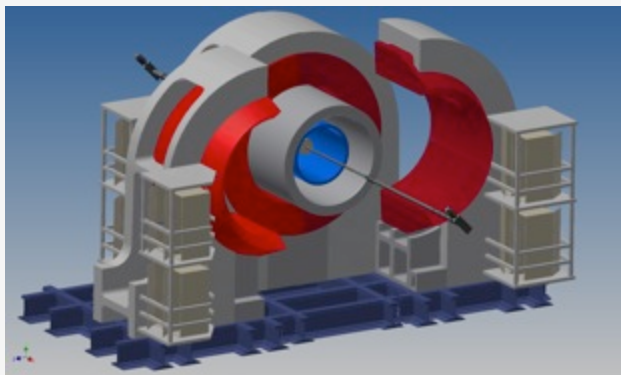


TESTING - LOAD - WORK

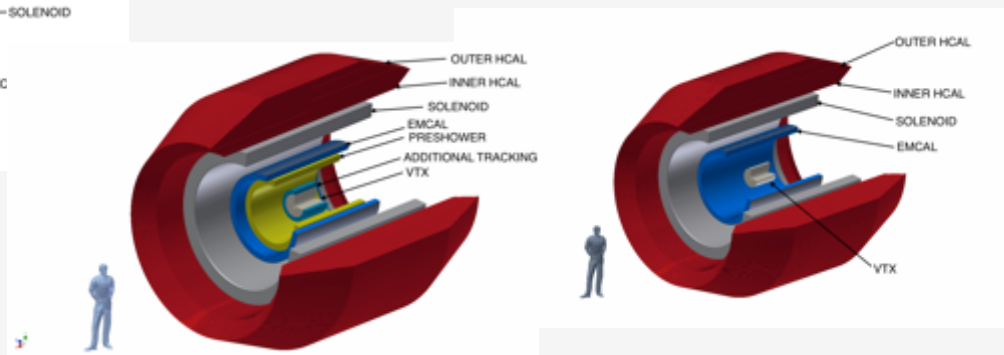


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TECHNICAL SUPPORT

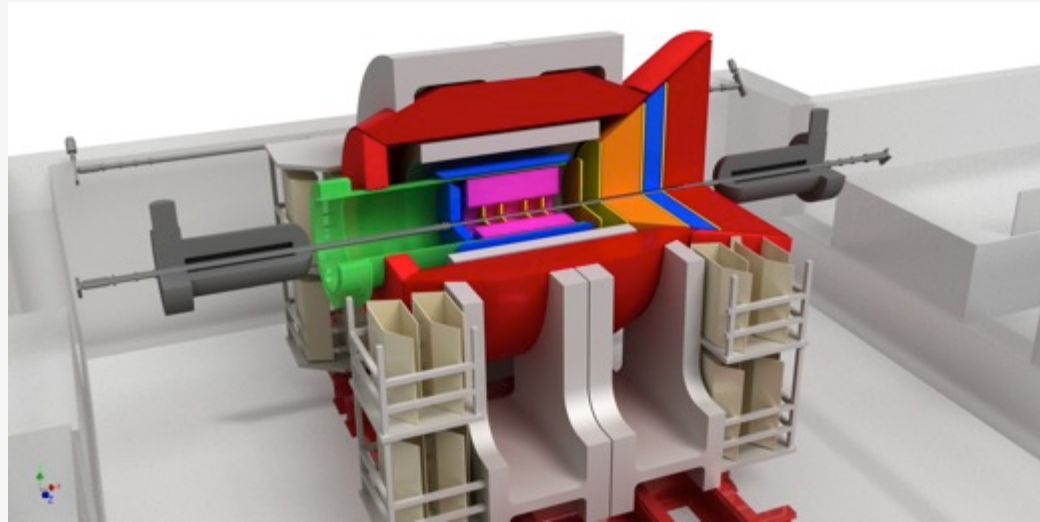


sPHENIX Modeling
support for
updated MIE

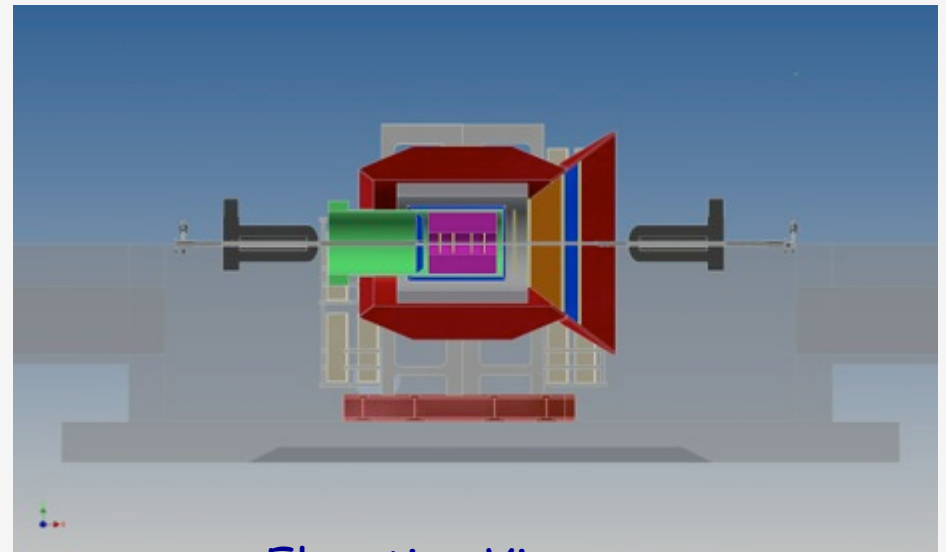
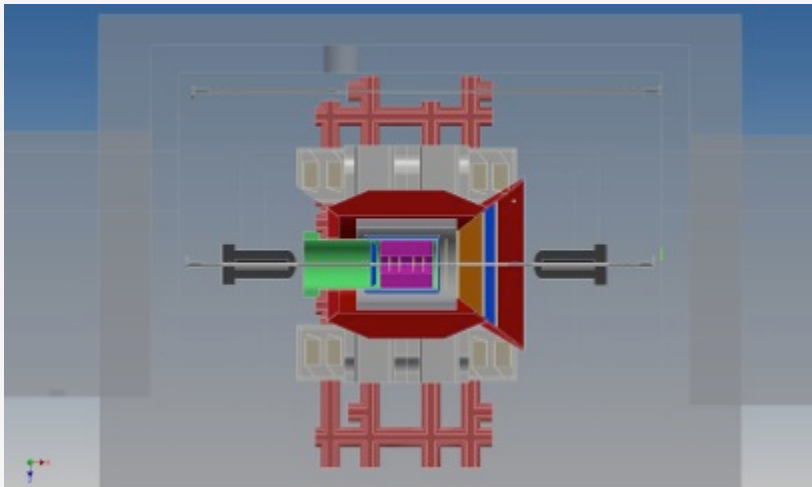


11/21/2013

ePHENIX



Plan View



Elevation View

Window Washer Winch Upgrade Summary of Tasks

Receive and Inspect winch and components - Done

Design and Fabricate Winch & Sheave Base - Done

Install and test Winch, integrate winch w washer hardware, controls and power - Done

Final Inspection and approval of window washer upgrade - Done

(Note: remote safety pin insertion and retraction was installed and has been in operation since the start of run 13.)

John Hynan inspected and made recommendations:

- Correct clamp orientation - Done
- Wear noted on platform cable (existing cable) monitor and replace in near future - will do
- Post maximum load for winch - will do
- Use daily scaffold checklist - will do
- Put winch, cables, and platforms on annual PM schedule - will do

.His recommendations are being implemented. Upgraded window washer platforms now ready for service

Alcohol Chiller Work For Shutdown 2013



Merlin Chiller

➤Chiller supplied about ½ the flow as in the past.

- Pressure on chiller says ~70-80psi
- Install gauge on supply line and measure actual output pressure.
- Replace chiller with spare if needed.
- Send old chiller out for maintenance or replace.

New Chiller warranty replacement ready for test and installation

Re-Insulate Glycol lines

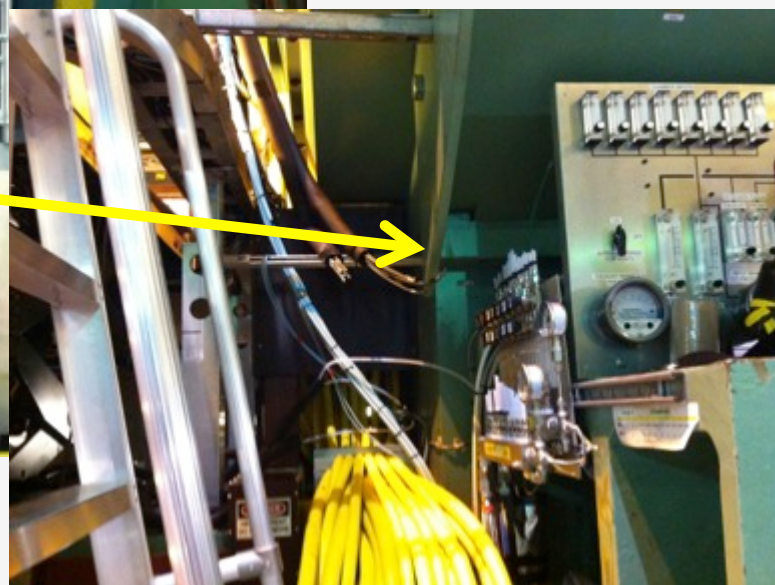


❖Remove old polyethylene insulation and wrap and replace with foam rubber insulation.

- Temp of fluid is affected too much by temp change in the gas house.
- Lines are condensing and dripping because of gaps in insulation.

Low priority complete prior to run 14

DONE



Replace VTX supply tubing with stainless steel as much as possible -
Done

11/21/2013

2013 Shutdown Schedule

TESTING - REPORT - DONE

Prep for 2013 shutdown	Done
Design, Fabricate MPC-Ex	
Define tasks and goals	
Analysis and design of fixtures, tools and procedures	
Fabricate/procure tools and fixtures	
Tests, mockups, prototypes	
Receive, fabricate, modify, finish installables	
Review and approval of parts, tools, fixtures and procedures	
Assembly and QA tests	
VTX Strippixel redesign	Done
VTX Strippixel 1 st article stave assembly	Done
VTX Strippixel 1 st article qualification/performance tests	Done
VTX Strippixel sensor reclamation	Done
Run 12 Ends	Done
Shutdown Standard Tasks	Done
• Open wall, disassemble wall, Remove MuID Collars	
• Move EC to AH, etc.	
VTX/FVTX Post run tests	Done
Disassemble VTX/FVTX services	Done
July 4 th Holiday	Done
Remove VTX/FVTX and transport to Chemistry Lab	Done
Remove Lampshade MMS, East Vertical	Done
VTX strippixel stave production	Done
Pixel Ladder repairs	Done
VTX Strippixel ladder assembly & Test	Done
Assemble and Test Partial MPC-Ex	Done
Install Partial MPC-Ex	11/18-27/2013

MuTR Troubleshooting, maintenance and repairs	Done
Summer Sunday (8/4) Prep and teardown	Done
Summer Sunday (RHIC)	Done
DC West troubleshooting & Repairs	Done
DC East Window Upgrade and Related Repairs	Done
Re-assemble VTX/FVTX halves	Done
Test, survey (at Chemistry)	Done
Install & Survey VTX/FVTX in 1008 IR	11/14-11/27/2013
VTX Commissioning	11/25/2013-1/31/2014
Other detector maintenance as required	As required
Infrastructure maintenance as required	As required
Pre-run commissioning and prep for run 14	11/25/2013-1/31/2014
sPHENIX HCal Prototype Assembly/test	8/19-12/31/2013
Thanksgiving Holidays	11/28-29/2013
Prep for EC roll in	11/1-12/2/2013
Roll in EC	12/2-12/6/2013
Prep IR for run	12/1-12/15/2013
DC West wire repairs	12/15-12/30/2013
Christmas Holiday	12/24-25/2013
New Year's Day Holiday	1/1/2014
Pink/Blue/White sheets	12/14-1/31/2014
Start run 14	2/3/2014

Safety and Security

From John Maraviglia:

1. ODH-1 Training Practical Wed. 11/13, Wed. 12/4, Fri 12/6
(Note: This training is good for 3 years); ODH1 (web course good for 1 year);
ODH1 medical protocol (with lab physical, good for 1.5 years)

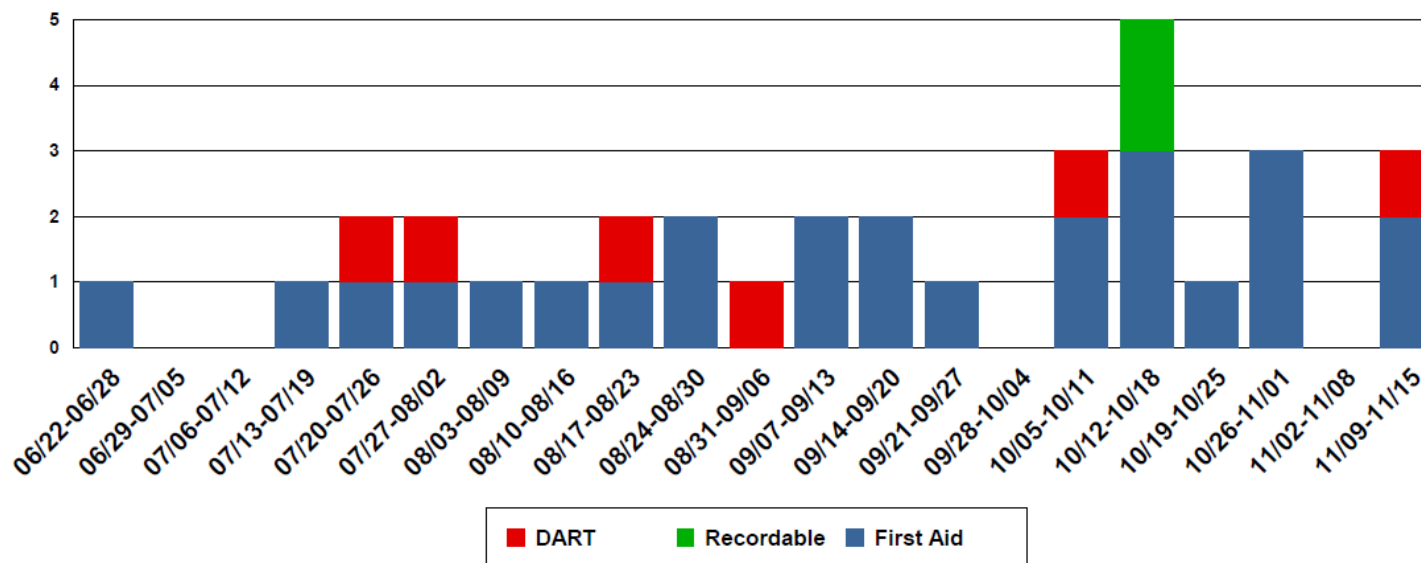
Attend one of these from 11:15-Noon if your training has lapsed and you may need to access tunnel during run 14

2. Vacuum Oxygen Deficiency Hazard (VODH) safety system. New and in place for run 14. See 11/14/13 planning meeting slide for more info.

From Ray Karol:

1. Lab focusing on reducing laceration injuries: most commonly to hands during manual tasks. Take extra caution to evaluate needs for PPE for each new task, each and every day.
2. ASME Pressure Vessel and Piping codes. Any new designs for piping, pressure vessels and/or vacuum vessels must comply with the pressure vessel codes sections I through VIII and ASME B31. See Don Lynch if you have questions.
3. NRTL Requirements: all new electronic equipment must conform to requirements of Section 5.2 of C-AD OPM 1.5. See Paul Giannotti if you have questions.

Injuries Per Week
As of 11/15/2013



Injury Status:

FY14 YTD: DART – 2, TRC – 4, First Aid – 11

FY13: DART – 14, TRC – 37, First Aid – 53

FY12: DART – 19, TRC – 38, First Aid – 69

FY13 Injury Listing: [https://intranet.bnl.gov/esh/shsd/seg/Occlnj/BNL Injuries.aspx](https://intranet.bnl.gov/esh/shsd/seg/Occlnj/BNL%20Injuries.aspx)

Recent Injuries

11/13/13	First Aid	An employee slipped on ice when getting into a vehicle, scraping their knee. At the OMC, first aid was given.
11/12/13	DART	An employee was pounding a snow stake into the ground when the stake shattered, lacerating his left leg. At the OMC, prescription medication was given and he was sent to the ER for sutures.
11/12/13	First Aid	An employee cut their knuckle on a door latch. At the OMC, first aid was given. Upon investigation, the latch was discovered to have a sharp edge and will be repaired/replaced.
10/29/13	First Aid	An employee got his foot caught and fell, bruising an arm. At the OMC, first aid was given.

Recent Events

11/15/13	SC-BNL	Fire/Rescue extinguished a brush fire in a 3/4 acre area west of Upton Rd and north of Brookhaven Ave. There were no injuries and no damage to Laboratory property. The fire was not near any BNL facilities. (Event Link)
11/14/13	Non-Reportable	Routine testing at the waste water treatment facility indicated elevated ammonia levels in the effluent. This condition continued through the afternoon. The influent and effluent have been diverted to holdup ponds. The issue is under investigation. (Event Link)
11/13/13	SC-3	While removing shrink wrap from a pallet at Building 321, a 50 lb. bucket of ice melt fell approximately 3.5 feet from the top of the pallet. The bucket narrowly missed the worker as a co-worker pulled him away. This event was deemed a near miss to a significant injury. (Event Link)
11/7/13	SC-3	A contractor was making two 4-inch floor penetrations at Building 928 when he discovered that he had cut through an electrical conduit. The conduit was about 4 inches below the 6-inch thick floor and had been cut at both penetrations, which were a few inches apart. There were no visible sparks or any other indications that an electrical conduit had been cut. On November 12, it was determined that the conduit had been energized when cut. There were no injuries. An investigation has been initiated. (Event Link)

Where To Find PHENIX Engineering Info

Thanksgiving Next week:

No work Thursday & Friday

No Planning Meeting Thursday



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

11/21/2013



27